

1  
2  
3 (i) contacting an IRAK-4 polypeptide with said compound, wherein said IRAK-  
4 4 polypeptide comprises at least about 70% amino acid sequence identity to SEQ ID NO:1 or  
5 SEQ ID NO:3; and  
6 (ii) determining the functional effect of said compound on said IRAK-4  
7 polypeptide.

Please add the following new claim:

1 --63. (New) The method of claim 31, wherein said polypeptide comprises an  
2 amino acid sequence of SEQ ID NO:1.--

REMARKS

The specification has been amended to provide the proper cite, *i.e.*, proper page numbers, for the Wesche, *et al.* reference cited in the paragraph beginning at page 2, line 7. In addition, claims 31, 38 and 54 have been amended in order to put them in a proper format. Support for the amendments to the specification and claims can be found throughout the specification and claims as originally filed and, thus, no new matter has been introduced.

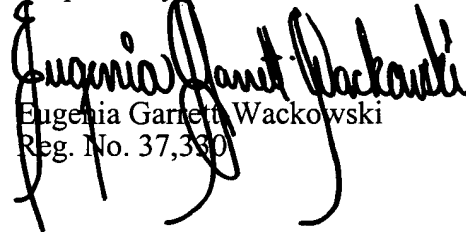
Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 925-472-5000.

Respectfully submitted,

  
Eugenia Garrett Wackowski  
Reg. No. 37,330

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: (415) 576-0200  
Fax: (415) 576-0300  
EGW:lls

SF 1185820 v1

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the specification**

Paragraph beginning at page 2, line 7, has been amended as follows:

The IL-1 signal transduction cascade is analogous to a signaling cascade in *Drosophila melanogaster* that is involved in the establishment of dorsal ventral polarity during the early development of *Drosophila* embryos. Specifically, in *Drosophila*, the extracellular ligand Spaetzle binds to a receptor called Toll, which shares homology to IL-1R. In addition, a serine/threonine kinase acting downstream of Toll activation, Pelle is homologous to IRAK kinases (Cao, *et al.*, *Science* 271:1128-1131 (1996); Muzio, *et al.*, *Science* 278:1612-1615 (1997); Wesche, *et al.*, *J. Biol. Chem.* 274:19403-19410 (1999)). Finally, activation of the Toll receptor results in the activation of the transcription factor Dorsal, which is homologous to NF- $\kappa$ B. Dorsal is inhibited in *Drosophila* cells by Cactus, which is itself homologous to the NF- $\kappa$ B inhibitor I $\kappa$ B.

**In the claims**

Claims 31, 38 and 54 have been amended as follows:

31. (Amended) A method of making an IRAK-4 polypeptide, the method comprising:

(i) introducing a nucleic acid [of claim 1 or claim 19] into a host cell or cellular extract, said nucleic acid encoding an IRAK-4 polypeptide, said polypeptide having at least about 98% amino acid sequence identity to SEQ ID NO:1 or to a subsequence thereof, wherein the amino acid sequence of the polypeptide comprises an alanine residue at an amino acid position corresponding to amino acid position 81 of SEQ ID NO:1, and wherein said nucleic acid comprises at least about 400 nucleotides;

(ii) incubating said host cell or cellular extract under conditions such that said IRAK-4 polypeptide is expressed in the host cell or cellular extract; and

(iii) recovering the IRAK-4 polypeptide from the host cell or cellular extract.

38. (Amended) The method of claim 36, wherein said compound is identified using a [the] method [of claim 32] comprising the steps of:

(i) contacting an IRAK-4 polypeptide with said compound, wherein said IRAK-4 polypeptide comprises at least about 70% amino acid sequence identity to SEQ ID NO:1 or SEQ ID NO:3; and

(ii) determining the functional effect of said compound on said IRAK-4 polypeptide.

54. (Amended) The method of claim 47, wherein said inhibitor comprises a compound identified using a [the] method [of claim 32] comprising the steps of:

(i) contacting an IRAK-4 polypeptide with said compound, wherein said IRAK-4 polypeptide comprises at least about 70% amino acid sequence identity to SEQ ID NO:1 or SEQ ID NO:3; and

(ii) determining the functional effect of said compound on said IRAK-4 polypeptide.

New claim 63 has been added as follows:

63. The method of claim 31, wherein said polypeptide comprises an amino acid sequence of SEQ ID NO:1.